

SEL-311C

Transmission Protection System

Standard with Ethernet and Serial Protocols⁽¹⁾, IEEE C37.118 Synchrophasor Measurement, 8 Outputs⁽²⁾, 6 Inputs, Conventional Terminal Blocks, AcSElerator QuickSet SEL-5030 Software⁽³⁾

Part Number:

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Protection

Standard with Four Zones of Phase and Ground Mho and Ground Quadrilateral, Phase, Zero-Sequence, and Negative-Sequence Overcurrent Elements, Voltage Elements, Frequency Elements, Out-of-Step, and Pilot Protection Logic

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Firmware

Three-Pole Trip and Reclosing
Single-Pole Trip with Three-Pole Reclosing
Single-Pole Trip with Three-Pole Reclosing and High-Speed Mho Distance Elements ⁽⁴⁾ *

				1											
				2											
				3											

Chassis⁽⁵⁾

2U
3U*
2U with Conformal Coated Circuit Boards*
3U with Conformal Coated Circuit Boards*

				0						X					
				1											
				2						X					
				3											

Mounting

Horizontal Rack Mount
Horizontal Panel Mount
Horizontal Projection Panel Mount*
Vertical Rack Mount ⁽⁵⁾
Vertical Panel Mount ⁽⁵⁾
Vertical Projection Panel Mount ⁽⁵⁾ *

				H											
				3											
				5											
				V											
				4											
				6											

User Interface

Standard Interface including USB*
Standard Interface including USB plus Indoor SafeLock Trip/Close Pushbuttons ⁽⁶⁾ *
Standard Interface including USB plus Programmable Operator Controls and Target LEDs ⁽⁷⁾⁽⁸⁾ *
Standard Interface including USB plus Indoor SafeLock ^(TM) Trip/Close Pushbuttons, Programmable Operator Controls and Target LEDs ⁽⁶⁾⁽⁷⁾⁽⁸⁾ *

				H											
				J											
				P											
				R											

Power Supply

24/48 Vdc
48/125 Vdc or 120 Vac
125/250 Vdc or 120/230 Vac

								2							
								3							
								4							

Communications Interface

(1)100Base-FX MM LC, EIA-485*
(2)10/100Base-T, EIA-485*
(2)100Base-FX MM LC, EIA-485*

								D							
								E							
								F							

(1)10/100Base-T, (1) 100Base-FX MM LC, (1) Fiber-Optic MM ST Serial Port*													H			
(2)10/100Base-T, (1) Fiber-Optic MM ST Serial Port*													J			
(2)100Base-FX MM LC, (1) Fiber-Optic MM ST Serial Port*													K			

Secondary Input Current

1 Amp Phase, 1 Amp Neutral														1		
5 Amp Phase, 5 Amp Neutral														5		

Control Input Voltage

24 Vdc														1		
48 Vdc														2		
110 Vdc														3		
125 Vdc														4		
220 Vdc														5		
250 Vdc														6		

I/O Board

No Additional I/O ⁽²⁾														X		
Additional 12 Std Outputs, 8 Inputs ^{(8)*}														2		
Additional 4 Std outputs, 16 Inputs ^{(8)*}														4		
Additional 8 High-Speed, High I/C Outputs, 8 Inputs ^{(8)*}														5		
Additional 12 High I/C Outputs, 8 Inputs ^{(8)*}														6		

Communications Protocols

Standard Protocols																1
Standard plus IEC 61850*																2

Accessories

USB connection cable (USB Standard A to B Plug)*		C 6 6 4
Literature		
	SEL-311C-1 Printed English Instruction Manual ⁽⁹⁾	P M 3 1 1 C - 0 2
	SEL-311C-2,-3 Printed English Instruction Manual ⁽⁹⁾	P M 3 1 1 C - 0 3

* Additional Cost

⁽¹⁾ No-Cost Ethernet Protocols: DNP3 Outstation, Modbus, Telnet, FTP, Web Server, SNMP, IEEE C37.118 Phasor Measurement. No-Cost Serial Protocols: DNP3 Level 2, Modbus RTU, SEL ASCII, Compressed ASCII, Settings File Transfer, Fast Meter, Fast Operate, Fast SER, Phasor Measurement, MIRRORED BITS.

⁽²⁾ OUT101, OUT102, and OUT103 are configured as Hybrid High-Current Interrupting output contacts.

⁽³⁾ Download ACSELERATOR Quickset SEL-5030 software for free at <https://www.selinc.com/software/resolutions/>. ACSELERATOR Quickset on CD (503001WX4) is available upon request.

⁽⁴⁾ SEL recommends additional I/O Board option 5.

⁽⁵⁾ 2U Vertical relays have no LCD.

⁽⁶⁾ The breaker position indicating LEDs of the Indoor SafeLock Trip/Close Pushbutton option have a white diffusing material over the LED which creates a wide viewing angle.

⁽⁷⁾ Programmable user interface options include configurable labels.

⁽⁸⁾ Available in 3U chassis only.

⁽⁹⁾ The 311C comes standard with a CD manual. One complimentary printed instruction manual is available upon request with each product purchased.

Making Electric Power Safer, More Reliable, and More Economical®

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